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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,079	07/13/2005	Hideki Sawada	10921.341USWO	2924
52835 7590 10/29/2007 HAMRE, SCHUMANN, MUELLER & LARSON, P.C. P.O. BOX 2902 MINNEAPOLIS, MN 55402-0902			EXAMINER LEE, CHEUKFAN	
			ART UNIT 2625	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/542,079

**Applicant(s)**

SAWADA, HIDEKI

**Examiner**

Cheukfan Lee

**Art Unit**

2625

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 13 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/13/2005.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_.

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1. Claims 1-9 are pending. Claims 1 and 6 are independent.

2. The drawings are objected to because of the following:

Figs. 10 and 11 should be labeled with – PRIOR ART – in order to make the figures distinct from the invention figures. See page 3, line 16 – page 4, line 14 and page 7, lines 12-19.

3. Claims 1-9 are objected to because of the following:

In claim 1, line 7 of the claim, "to be read" should read – being read --.

In claim 6, line 7 of the claim, "to be read" should read – being read --.

Claims 2-5 and 7-9 are objected to as being dependent on objected base claim 1 or 6.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3, 5, 6, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Applicant's admitted prior art.

The claims are written such that Applicant's admitted prior art meets all claim limitations.

Regarding claim 1, Applicant's prior art image sensor head (prior art Figs. 8 and 9) comprises a case (120) elongated in a primary scanning direction (N1) and mounted on a bracket (106) movable in a secondary scanning direction (N2), a light source (131) accommodated in the case (120), and light receiving elements (142s) accommodated in the case (120) for receiving light from a document being read, wherein the case (120) is provided with two positioning means (one being the left engaging means 121 formed with the recess 171 as viewed in Fig. 9, and another being the right engaging means 121 without a recess) for preventing the case (120) from moving in the primary scanning direction (N1) (page 1, line 12 – page 3, line 12).

Regarding claim 3, Applicant's prior art sensor head further comprises an elongated circuit board (124 in Fig. 9) fixed to the case (120), and a connector (114) supported by the board (124) for external connection, wherein the light source (131) is mounted on an end of the board (124), the connector (114) being attached to another end of the board (124) (Fig. 9).

Regarding claim 5, Applicant's prior art sensor head (Fig. 9) further comprises two cylindrical projections (121a) for preventing the case (120) from moving in the secondary scanning direction (N2) relative to the bracket (106), wherein each cylindrical projection (121a) is positioned adjacent to a corresponding one of the positioning

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means (the left positioning means 121 formed with the recess 171 as viewed in Fig. 9, the right positioning means 121 without a recess), and projects in the primary scanning direction (see Fig. 9).

Claim 6 is also met by Applicant's admitted prior art. The prior art image scanner (Figs. 8 and 9, page 1, line 12 – page 3, line 12) comprises a case (120) elongated in a primary scanning direction (N1), a bracket (106) that supports the case (120) and is movable in a secondary scanning direction (N2), a light source (131) accommodated in the case (120), light receiving elements (142s) accommodated in the case (120) for receiving light from a document being read, a circuit board (124) fixed to the case (120) and supporting the light source (131) and the light receiving elements (142s), a connector (114) attached to the circuit board (124) for external connection, and a drive assembly (including timing belt 152) for reciprocating the bracket (106) in the secondary scanning direction (N2), wherein the case (120) is provided with two positioning means (one being the left engaging means 121 formed with the recess 171 as viewed in Fig. 9, and another being the right engaging means 121 without a recess) for preventing the case (120) from moving in the primary scanning direction (N1) relative to the bracket (106), the two positioning means being spaced from each other in the primary scanning direction (Figs. 8 and 9, page 1, line 12 – page 3, line 12).

Regarding claim 8, the connector (114 in Fig. 9) is arranged between the two positioning means (the positioning means 121 formed with the recess 171 and the

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positioning means without a recess) and located at a position closed to one of the positioning means (the one 121 with the recess 171).

Regarding claim 9, Applicant's prior art scanner further comprises a flexible cable (113 in Fig. 8) connected to the connector (114).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Takahara (U.S. Patent No. 6,285,441), cited by Applicant in the IDS filed July 13, 2005.

Regarding claim 2, in Applicant's prior art (Figs. 8 and 9), one positioning means (the left engaging means 121 formed with the recess 171) comprises a recess (171) into which a post (172) provided at the bracket (106) is fitted. The other positioning means (the right positioning means 121) does not comprise a recess.

Takahara discloses an image sensor head comprising a case (2) mounted on a bracket (4), the case (2) provided with two substantially identical positioning means (2a and 2b) near two respective ends of the case (2) (Fig. 4) to engage with two respective substantially identical ends of the bracket (4).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a positioning means, substantially identical to the positioning means (the left positioning means 121 formed with the recess 171) comprising a recess into which a post provided at the bracket (the right end of the bracket 106), as the right positioning means (121) of Applicant's prior art, as taught by Takahara, in order to provide a balanced support between the bracket and the case (120).

Claim 7 is rejected for the reason given for claim 2, for claiming the similar limitations.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Sheng (U.S. Patent No. 5,801,851),

Regarding claim 4, Applicant's prior art discussed above for claim 1 does not comprise an elastic member contacting with the board (124 in Fig. 9) for urging the case (120). However, the concept of employing an elastic member (spring 4) in between an image sensor board or a support thereof and a bracket (2) that supports the sensor board to urge the case (1) toward the glass window (5a) is taught by Sheng (Figs. 2-4, col. 2, lines 55-61). The spring (4) urges the case of the image sensor such that the image sensor (1) are in close contact with one side of the glass window (5a).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the concept of Sheng to employ an elastic member between

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the board (124) of Applicant's prior art to urge the case (120), so that the case (120) is in close contact with a side of a glass window as taught by Sheng.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (571) 272-7407. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cheukfan Lee  
September 23, 2007